



Nurse Delegation Program

Medication Assistant Certification (MAC)

QUICK FACTS FOR MACs

*For Programs Providing
Mental Retardation Services*

MANUAL 4.1

MAC Worker: _____

MAS Nurse: _____

Facility: _____

Alabama Department of Mental Health and Mental Retardation

www.mh.alabama.gov

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NURSE DELEGATION PROGRAM (NDP 4.1)

Quick Facts for MACs

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QUICK FACTS FOR MACS

The MAC Staff Handbook for Assisting in Group Homes with Mental Retardation

Your Role as a MAC Worker

The medication assistant certification (MAC) staff assumes an important responsibility as the eyes and the ears for the nurse and every other member of the clients' healthcare team. This handbook contains essential information that can be rapidly used to remember key facts about persons with mental retardation. The checklists include important changes that you may detect in a client. When you detect those changes you should inform your nurse. The fact sheets include important information about health problems and medications. You can refer to this material during your duties as a MAC worker.

Using MAC Facts

This material is to be used as a reminder and memory aide. The MAC staffer should call the nurse or supervisor when there is a serious question about a client's clinical condition.

The handbook can help MAC staffers discuss medications and health conditions with the client or family. The client's families have access to this material as a teaching resource.

Thank You for Your Devotion to our Clients

As a MAC worker, you are an important part of the treatment team for persons with serious mental illness. We appreciate your hard work and concern. You can add to this material as your knowledge expands over time.

**MAC STUDENT HANDBOOK
FOR MR RESIDENTIAL GROUP HOMES**

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IMPORTANT TELEPHONE NUMBERS FOR MAC WORKERS

	DAYTIME	AFTER HOURS
On Call Nurse		
Other Nurses		
Administrator		
Ambulance		
Police		
Fire Department		
Pharmacist		

COMMON ABBREVIATIONS

1. mg – milligram
2. ml – milliliter
3. oz. – ounce
4. BID – twice per day
5. TID – three times per day
6. QID – four times per day
7. HS – at bed time

REMEMBER: WHEN CALLING AN AMBULANCE FOR AN EMERGENCY:

- a. DO NOT leave the client unless absolutely necessary.
- b. Follow the facility procedure for dealing with medical emergencies.
- c. Make sure the EMT's know the client's medications and drug allergies.

CHECKLIST 1

Common Changes in Appearance of Residents with Mental Retardation that Require Immediate Attention

Resident Appears:	Possible Problem Causing Change	Suggested Actions
Cold, sweaty	Infection, low blood pressure, low blood sugar	
Pale	Low blood level, anemia, infection	
Grey or dusky	Low oxygen, low blood pressure, low blood sugar, unrecognized infection	
Red-faced, warm	Infection, drug allergy, high blood pressure	
Red-eye	Infection, increased eye pressure, eye injury, drug intoxication	
Rash	Drug or food allergy, fever, infection	

NOTES:

CHECKLIST 2

Common Changes in a Resident's Mental Status with Mental Retardation that Require Immediate Attention

The Resident Appears:	Possible Explanation	Suggested Actions
Sleepy	Infection, drug toxicity, seizures, low blood pressure, low oxygen, low blood sugar, drug intoxication*	
Irritable	Pain, drug toxicity, low blood sugar, drug ingestion*	
Confused	Drug toxicity, low oxygen, low blood pressure, seizure, low blood sugar, drug intoxication*	
Agitated or Aggressive	Drug toxicity, new health problem causing pain, seizures, low blood sugar, constipation, drug use*	

* Illegal street drugs or alcohol

NOTES:

CHECKLIST 3

Important Behavioral Changes in Residents with Mental Retardation that Require Immediate Attention

The Resident Won't:	Possible Explanation	Suggested Actions
Walk	Pain, broken bone, stroke, heart problems, excess sedation, drug overdose	
Talk	Stroke, excess sedation, drug overdose	
Eat	Stroke, stomach problems, bowel problems, dental problems, infection, broken tooth, cut tongue	
Wake Up	Stroke, medication overdose, drug overdose, health emergency, drug overdose	

NOTES:

CHECKLIST 4

Important Changes in Vital Signs of Residents with Mental Retardation that Require Immediate Attention

Vital Sign Change	Normal	Immediate Report Level	Common Possible Causes
High blood pressure*	Top – 90 to 140 Bottom – 60 to 90	Top – over 160 Bottom – over 100	Pain, fear, anxiety, medication side effect, seizure, non-compliance with high blood pressure medication
Low blood pressure*	Top – 90 to 140 Bottom – 60 to 90	Top – less than 90 Bottom-less than 60	Internal bleeding, dehydration, heart problems, drug reactions, excessive medications for high blood pressure,
Fast Pulse at Rest	60 to 90	Over 90	Pain, fear, drug reactions, seizures, heart problems, internal bleeding, drug intoxication
Slow Pulse	60 to 90	Below 60	Heart problems, drug side effects, drug overdose
Fast Breathing at Rest	12 to 16	Over 16	Asthma, pain, fear, lung disease, heart problems, seizures, low oxygen in blood, pneumonia, drug overdose
Slow Breathing while awake	12 to 16	Below 8	Excessive sedation, brain emergency, low blood sugar, drug overdose
High Temperature	97 to 100	> 100	Infection, drug reaction, heat stroke
Low Temperature	97-100	< 97	Shock, severe infections

*Systolic = top number

*Dystolic = bottom number

NOTES:

MAC CHECKLIST ON MANAGING SEIZURE EMERGENCIES

DO I KNOW?

		YES	NO
1.	My facility policy on managing seizure emergencies.		
2.	Which clients have epilepsy (seizures)?		
3.	What the seizures look like for each client.		
4.	How to keep a client safe from harm during a seizure.		
5.	To never leave a client alone who is having a seizure.		
6.	The warning signs for a severe seizure.		
7.	When to call 911.		

FACT SHEET ON THE NURSE DELEGATION PROGRAM (NDP)

1. The new medication administration changes are required to comply with federal guidelines.
2. Regulations by the Board of Nursing provides for assistance with medications by persons who are not a Registered Nurse or an LPN.
3. A licensed nurse must perform rectal or vaginal suppositories, injections and other invasive procedures except for specific circumstances.
4. The NDP exception only applies to the Department of Mental Health/Mental Retardation because we are a state agency with state regulatory authority.
5. Medication Assistant Certified (MAC) workers are persons who have undergone training and passed a two-step certification process.
6. Training involves 24 hours of education that includes classroom and practical experience.
7. A licensed nurse must delegate authority to a MAC worker by signing a delegation form.
8. The Medication Assistant Supervising (MAS-RN/LPN) nurse must have training and pass a knowledge test for certifying the MAC worker.
9. The facility's MAS nurse must monitor quality indicated for assistance with medication and report medication mistakes.
10. A website is available for nurses and MAC workers to provide information, feedback and additional material – www.alanurse.com or www.mh.alabama.gov.

FACT SHEET ON HELPING THE NURSE TO PROVIDE MEDICATIONS TO PERSONS WITH MENTAL RETARDATION

1. Most mental retardation is caused by permanent wiring problems in the brain.
2. People with mental retardation may not understand the need to take medication.
3. Mental retardation can produce “psychotic” symptoms such as hearing voices or seeing things.
4. Some persons with mental retardation have false beliefs called delusions.
5. The false images or false beliefs produced by mental retardation are real to the client.
6. Antipsychotic medicines may help reduce the intensity of false beliefs or false images.
7. Do not argue with clients about false ideas and do not try to reason with their beliefs.
8. Psychotic symptoms such as false beliefs, false voices, and false visions are often stressful for a client.
9. Medications called “antipsychotic drugs” reduce the intensity of psychotic symptoms and improve quality of life for persons with mental retardation.
10. Psychotic symptoms are produced by brain misfire that is often caused by an inherited wiring problem in the brain.

FACT SHEET ON MEDICATION SIDE EFFECTS FOR CLIENTS WITH MENTAL RETARDATION

1. Medication side effects are common in all persons, especially those with serious mental illness.
2. People with communication problems may not be able to describe skin itching, upset stomach, rash, or other symptoms of medication side effects.
3. Many drugs cause dry mouth or funny taste that may reduce a client's desire to eat or drink.
4. Side effects are more common when drugs are first prescribed, especially during their first few weeks of treatment.
5. Side effects can develop at any point during the time a client is receiving the drug.
6. A past history of allergy to a medicine will increase the risk for repeat allergic reactions.
7. Allergic reactions can cause a skin rash, nausea, and vomiting.
8. More severe allergic reactions can cause swelling of the face and eyes.
9. Severe allergic reactions can cause swelling of the throat and breathing tubes in the lungs.
10. Severe allergic reactions can cause death.

FACT SHEET ON UNDERSTANDING RIGHTS AND RESPONSIBILITIES

1. Clients who can self-medicate have the right to refuse medicines.
2. Clients who can self-medicate have the right to understand the reason for receiving the medicines.
3. Clients who can self-medicate should not be forced to take medicines that they refuse.
4. Families have the right to ask questions about medicines.
5. MAC workers have the right to ask questions about medications from the nurse.
6. Families have the right to refuse the administration of medications.
7. Families have the responsibility to plan for consequences produced by refusing medications.
8. Facilities have the right to ask a client to leave when that client refuses important medicines.
9. MAC workers have the right to call the advocacy number to seek information.
10. MAC workers, nurses, and families have the right to ask the prescribing doctor about the reason for a medication and potential side effects.

FACT SHEET ON HIGH BLOOD PRESSURE FOR PERSONS WITH MENTAL RETARDATION

1. Clients with high blood pressure do not look different from people with normal blood pressure.
2. Most clients with high blood pressure cannot feel the change in their body.
3. The only way to detect high blood pressure is by measuring the client's blood pressure.
4. Untreated high blood pressure can increase the risk for stroke, heart attack, kidney failure, blindness, and many other diseases over years.
5. Treatment for high blood pressure works.
6. Treatment for high blood pressure is safe and not addictive.
7. High blood pressure is caused by the heart working too hard or blood vessels squeezing too tight.
8. Too much blood pressure medicine can cause fainting, swimmy-headedness, or passing out. Report these symptoms immediately to your nurse.
9. People with mental retardation have equal or greater risk of high blood pressure than other individuals.
10. People with high blood pressure may not be able to explain symptoms and you must watch them very carefully.

FACT SHEET ON DIABETES FOR PERSONS WITH MENTAL RETARDATION

1. Diabetes is the same as sugar diabetes or sugar.
2. Diabetes means that a person has high blood sugar.
3. Sugar is the fuel for the body.
4. Insulin controls the level of blood sugar.
5. High blood sugar or diabetes can cause heart disease, kidney disease, eye disease, and many other damaging illnesses over months or years.
6. Doctors prescribe two kinds of medicines for diabetes: 1) insulin injections, and 2) oral medicines that lower blood sugar.
7. Low blood sugar can produce confusion, shakiness, sweatiness, coolness or seizures.
8. High blood sugar can cause excessive thirst, urination, sleepiness or confusion.
9. Persons with mental illness have increased risk for developing diabetes.
10. Antipsychotic medications used to treat mental illness can cause or worsen diabetes.
11. You can help a client by encouraging exercise, weight control, and compliance with medications when appropriate for the client.
12. Monitor clients who self-inject with insulin to be sure that they eat on schedule after their insulin injections. Clients can suffer from low blood sugar when they take insulin and do not eat.

FACT SHEET ON SEIZURE DISORDER IN CLIENTS WITH MENTAL RETARDATION

1. Seizure disorder is the same as epilepsy and refers to people who have seizures, “spells” or epileptic fits.
2. Seizures are caused by brain cells firing beyond the control of the individual.
3. Seizures may cause movement of face, arms, legs, body, and sometimes loss of consciousness.
4. A seizure disorder is a health problem beyond the control of the person with the disease.
5. Medications can dramatically reduce the frequency and dangerousness of seizures in many clients.
6. People who take medications for seizures must receive these doses on schedules as determined by the doctor.
7. Notify your nurse anytime a client is not taking their seizure medications.
8. The nurse should notify the doctor when the client has missed multiple doses of their seizure medications.
9. A big change in the number or severity of seizures is important. Report this immediately to the nurse.
10. Many medications for seizure disorders have blood tests that tell the doctor how much medication is in the blood stream.
11. Staff should know the kind of seizures for each client and the type of behaviors produced by a spell, e.g., face twitching or arm jerking or blank stare.
12. There is no blood test, brain scan or brainwave test that tells a doctor whether seizure medicines are working.
13. Your observation on the number and severity of seizures help the doctor decide whether to change medicines.
14. Non-compliance with seizure medicines is a common reason that people have more seizures

FACT SHEET ON REPRODUCTIVE HEALTH FOR PERSONS WITH MENTAL RETARDATION

1. Persons with mental retardation are more likely to contract sexually transmitted diseases because they often lack understanding about these diseases.
2. Women with mental retardation can become pregnant like any other person.
3. Most forms of contraception work for persons with mental retardation.
4. Most medications do not interfere with the effect of birth control measures.
5. Birth control pills have side effects.
6. Women should not stop birth control pills unless they speak with their healthcare provider.
7. Some women use hormonal injections to prevent pregnancy.
8. Call your nurse anytime a client complains of missing periods or suspects pregnancy.
9. Women can become pregnant even when taking birth control pills.
10. Many medications prescribed for mental retardation can cause birth defects.
11. Persons with mental retardation may also be sexually active.
12. Some persons with mental retardation have the right to be sexually active but these persons must be able to agree to sex.

FACT SHEET ON EYE DISORDERS IN PERSONS WITH MENTAL RETARDATION

1. The outer layer of the eye is called the “cornea”.
2. The light passes through a lens and a shutter that is called the “iris”.
3. Images are recorded on specialized brain cells at the back of the eye called the “retina”.
4. There is fluid in all parts of the eye that is essential to good eye function.
5. Glaucoma is caused by high-pressure fluid in the eye.
6. Medicines will reduce the likelihood of glaucoma causing blindness.
7. Cataracts cause poor vision by clouding the lens of the eye.
8. Looking through cataracts is like seeing through a fuzzy, dark screen.
9. The outer covering of the eye may develop bacterial or viral infections called “conjunctivitis”.
10. Medicines can stop conjunctivitis.
11. Excessive tearing in an eye suggests some new problem that requires the attention of your nurse.
12. A painful or swollen eye is an emergency and you should call your nurse right away to ask for further instructions.

FACT SHEET ON UNDERSTANDING DISORDERS OF THE EARS IN PERSONS WITH MENTAL RETARDATION

1. Ear problems can produce serious pain and distress for clients.
2. Different parts of the ear can cause different problems.
3. The outer ear called the “pinna” is connected to the inner ear by a 1-inch long tube about the size of your pinkie finger.
4. The inner ear has a curtain of tough tissue called the “tympanic membrane”.
5. The inner ear is filled with fluid.
6. The ear is connected to the nasal sinuses and swallowing will clear your ears.
7. Infections of any part of the inner ear can cause great pain, fever, and distress.
8. Wax normally accumulates in the ear canal, but the brown, gooey material should never be removed with a sharp object.
9. Some individuals may jab sharp objects in the ear canal or place foreign objects in the ear canal causing infections, bleeding, and other changes. Report this immediately to your nurse.
10. Hearing aids increase the volume of sound but these devices must have batteries to work properly.
11. Hearing problems are common in persons with mental retardation and poor hearing can produce behavioral problems.
12. Head-banging may result from hearing voices or having pain in the ear from an infection.

FACT SHEET ON THE ROLE OF ANTIBIOTICS IN PERSONS WITH MENTAL RETARDATION

1. Infections are common in all persons in many body locations.
2. The body can be infected with several different kinds of organisms including bacteria, viruses, and other less common organisms.
3. Antibiotic therapy is usually prescribed to kill bacteria.
4. Antibiotic therapy is not effective against viruses
5. Some forms of special anti-virus medicine, such as Tamiflu, can be used to reduce the symptoms of colds or the flu.
6. Infections can occur in any part of the body, including the sinuses, the ears, the gums, and others. These infections produce behavioral problems or confusion in the mentally retarded person.
7. Bladder infections are common in women and these symptoms can produce behavioral problems in the mentally retarded person.
8. Treatment for Tuberculosis is different from that of bacteria and requires months of medication.
9. Antibiotics may cause diarrhea by killing normal bacteria in the colon.
10. Antibiotics may cause yeast infections in the mouth or vagina.

FACT SHEET ON MEDICATIONS FOR STOMACH OR BOWEL PROBLEMS FOR PERSONS WITH MENTAL RETARDATION

1. Digestion includes: 1) chewing and moving food to the stomach through the esophagus, 2) digestion in the stomach, 3) absorption of nutrients in the intestines, and 4) drying of the bowel movement in the colon and storage of the bowel movement in the rectum.
2. Some medicines can cause problems with chewing, swallowing, and food getting stuck in the food pipe.
3. Stress can cause excess acid production in the stomach.
4. Many kinds of medicines will reduce stomach acid.
5. Many medications will slow bowel movement.
6. Slow bowel movements can become hard and some can become stuck in the rectum.
7. Stool softeners add water back into the bowel movement.
8. Laxatives flush bowel movement out of the colon.
9. Always tell the nurse when clients complain of food getting stuck or burning sensations in the stomach.
10. Tell the nurse when a client does not have a bowel movement following a laxative or an enema.
11. Enemas must be administered by a Registered Nurse or LPN.
12. Bowel problems can cause distress and agitation.

FACT SHEET ON BREATHING MEDICINES FOR PERSONS WITH MENTAL RETARDATION

1. Breathing provides oxygen to the body. Low oxygen in the blood can damage the body and the brain.
2. Breathing troubles can occur because: 1) the brain does not tell the lungs to breathe fast enough, 2) upper airways do not allow flow of air, 3) lower air pipes clamp down or 4) lungs are damaged by smoking.
3. People with brain disorders may quit breathing at night or when asleep and these individuals have machines to help keep oxygen in the body.
4. People may have problems with their throat or nose that disrupts normal breathing.
5. A valve in the throat, called the “epiglottis”, prevents food and saliva from entering the lungs.
6. Neurological problems can cause the air valve to malfunction producing aspiration or inhaling.
7. Asthma is caused by small deep air pipes clamping shut.
8. Inhaled medicine relaxes small airways when inhaled deep into the lungs.
9. Low oxygen in the blood stream can produce confusion, lethargy, and behavioral problems.
10. The MAC worker’s job is to be sure that medicines are swallowed or inhaled on a regular basis and that other treatment, such as extra oxygen, is available for the client.

RIGHTS AND RESPONSIBILITIES UNDER THE NURSE DELEGATION PROGRAM

1. Rights of the MAC Worker

- Proper education about medication assistance and orientation to the client
- Support by the MAS nurse and other licensed professionals within the residence
- Access to consultation by telephone 24/7 about questions or concerns as to whether to give medication
- Sufficient time to assure that each client receives the level of care which is required under the MAC program

2. Responsibilities of the MAC Worker

- To follow all rules and regulations
- To carefully study all MAC material and know clients as well as possible
- To pay attention to the clients on a daily basis and listen to their concerns or complaints
- To ask questions whenever you are unsure about whether to give a medication
- To recognize that there is no such things as a “dumb question” with regards to client safety

RIGHTS AND RESPONSIBILITIES OF THE MAS NURSING STAFF

1. Nurses' Rights

- Proper education about the NDP program
- Adequate time to educate assigned MAC worker
- Freedom to select and delegate to workers based on the worker's ability and attitude
- The right to refuse to certify or maintain a worker who does not demonstrate skills and professionalism sufficient to carry this responsibility
- An adequate ratio of licensed professionals to MAC workers in order to provide safe management and adequate consultation

2. Responsibilities

- Follow rules and regulations
- Assist MAC workers and respond to questions or concerns
- Communicate with concerned facilities
- Educate the MAC workers

RIGHTS AND RESPONSIBILITIES OF THE ADMINISTRATION

1. Rights of Administrative Staff

- Pick MAS staff capable of managing the NDP system
- De-select individuals not appropriate for these responsibilities
- Seek assistance from regional offices when problems develop within the NDP system

2. Responsibilities

- Assure adequate staffing to meet the needs of the client
- Assure appropriate response to adverse occurrences
- Assure that quality assurance data precisely reflects occurrences within the facility
- Educating MAC staff and residence employees to nurse's responsibilities.

TERMINOLOGY

1. **NDP – Nurse Delegation Program.** A general term that refers to the entire system that allows non-licensed persons to assist licensed nursing professionals in the administration of medications.
2. **MAS – Medication Assistant Supervising nurse.** This term refers to registered nurses or LPN's who have undergone four hours of training, successfully completed the test, and are capable of delegating assistance responsibility to non-licensed healthcare workers.
3. **MAC – Medication Assistant Certified workers.** MAC workers are individuals with a high school education who have undergone 24 hours of MAC training and have passed Level-1 and Level-2 examinations.
4. **MATT – Medication Assistant Train-the-Trainer.** Individuals within specific organizations who are certified to train MAS staff. MATT workers take two additional hours of education in addition to the basic MAS training and must pass an additional test beyond the MAS examination.
5. **ABN – Alabama Board of Nursing.** An agency within the state of Alabama government that regulates nursing services. All nurses practicing in Alabama must adhere to BON regulations.
6. **BOP – Board of Pharmacy.** An Alabama state organization that regulates the practice of pharmacy administration of medications. All medications must be dispensed in accordance of BOP regulations.
7. **MAC-1. Medication Assistant Certification – Level 1.** A course of 12 hours that covers basic information that can be used in all treatment settings. The MAC-1 certificate is good in any facility certified by the Department of Mental Health and Mental Retardation.
8. **MAC-2.** The hands-on training provided by the MAS nurse to assure that a person is competent to perform basic skills within a designated organization. MAC-2 certification is only good for specific organizations or facilities.
9. **DMHMR – the Alabama Department of Mental Health and Mental Retardation.** A cabinet-level state organization that has the authority to certify and reimburse facilities for residential care provided to persons with mental illness, mental retardation, or substance abuse.
10. **HIPAA – Health Insurance Portability and Accountability Act.** A federal act and implementing regulations that protect the privacy of individuals and limit the distribution of confidential health information.
11. **MAR – Medication Administration Record.** An official, legal document that details the medications provided to a client as well as their administration in effect. Only a licensed nurse can change an MAR because of BON rules in Alabama. The MAC worker can document as to whether a specific client took a medication at any particular time.

NOTES

